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# To pee ... or not to pee?

A guide for men about their urinary symptoms

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NHMRC
National Health and Medical Research Council

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The strategic intent of NHMRC is to work with others for the health of all Australians, by promoting informed debate on ethics and policy, providing knowledge based advice, fostering a high quality and internationally recognised research base, and applying research rigour to health issues.

This document is a general guide to appropriate practice, to be followed only subject to a clinician's judgment in each individual case.

The guidelines are designed to provide information to assist decision making based on the best information available at the time of publication.

National Health and Medical Research Council documents are prepared by panels of experts drawn from appropriate Australian academic, professional, community and government organisations. NHMRC is grateful to these people for the excellent work they do on its behalf. This work is usually performed on an honorary basis and in addition to their usual work commitments.

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# Foreword

This consumer's guide to simple urinary symptoms in men has been written to assist you, in consultation with your doctor, to identify simple urinary symptoms which bother you to the point where they are affecting your quality of life. It has been written by the National Health and Medical Research Council (NHMRC) through its Standing Committee on the Quality of Care and Health Outcome's (QCHOC) Working Party on Voiding Dysfunction in Men.

The NHMRC has also written, 'Clinical Practice Guidelines' for the management of lower urinary tract symptoms in men—which has been distributed to interested health professionals and organisations involved in the management of urinary symptoms. The Consumer's Guide to urinary symptoms is a modified version of that clinical guide.

Both publications are based on the current medical evidence for the management of urinary symptoms. Where the evidence for a course of action is particularly strong, it has been highlighted.

Those who would prefer more information or who wish to check the references from which this information was drawn, can get a copy of the full guidelines by contacting, NHMRC Publications, Mail Drop 50, GPO Box 9848, Canberra ACT 2601.

I hope that you find this consumer's guide to simple urinary symptoms in men informative and helpful.

Professor Richard Smallwood
Chairman of Council

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# Preface

As men get older, it is very common for them to notice changes in the way they urinate (pass water, or pee). Changes include waking frequently from sleep to urinate in the night, a feeling of urgency to urinate during the day and at night, occasionally having to wait before urine flow commences, a weak urinary stream, dribbling of urine after going to the toilet and a feeling of wanting to urinate again just after having done so.

About 40% of Australian men over 45 years of age report having these changes, which doctors call *simple urinary symptoms*. Similar urinary symptoms occur in women in the same age group.

Simple urinary symptoms in men are caused by a combination of changes in bladder, urethra (water passage) and prostate gland function.

The symptoms can affect daily activities such as work, recreation and personal relationships. Some men may also believe that there is something wrong with their health. For these reasons they often consult their doctor.

This book provides the latest information about urinary symptoms in men, based on the best medical evidence available.

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Deciding on the type of treatment for urinary symptoms can be difficult. Men, in consultation with their doctor, can use the information in this book to help decide what treatment—if any—they should have.

Many men believe that urinary symptoms might indicate prostate cancer. Prostate cancer and its treatment fall outside the scope of these guidelines, which are about *simple urinary symptoms*.

This is not a book you need to sit down and read from cover to cover. It can be read in one go, or different sections can be read as the need arises. It may be of extra help to you if you discuss the information in the book with a doctor, family members or a friend.

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Chapter 1

# The Urinary System

As your blood passes through your *kidney*s, it is filtered of excess water and waste substances. The waste produced is *urine*. From each kidney, the urine flows down a tube, the *ureter*, and enters the *bladder* which acts as a reservoir until you to go to the toilet.

Your bladder is able to store urine by expanding in response to an ever increasing volume. The bladder will usually comfortably hold from 350 mL to 500 mL (equivalent to about a small can of soft drink). Most people need to empty their bladder four to six times a day.

## Sphincter muscles

The *sphincter* muscles in males are located at the neck of the bladder, encircling the *urethra* (water passage). While the bladder is storing urine, the muscles contract keeping the urethra and bladder neck closed. When you are about to pass urine, the sphincter muscles relax, opening the bladder neck and taking tension off the urethra. The muscles of the bladder wall then contract, expelling all the urine in your bladder.

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## Pelvic floor muscles

The *pelvic floor* muscles play an important role in bladder control. The floor of the pelvis is made up of layers of muscle and other tissue that stretch like a hammock from the tail bone at the back of your body to the pubic bone at the front. These muscles support your bladder and bowel. The urethra and *rectum* (back passage) pass between the pelvic floor muscles.

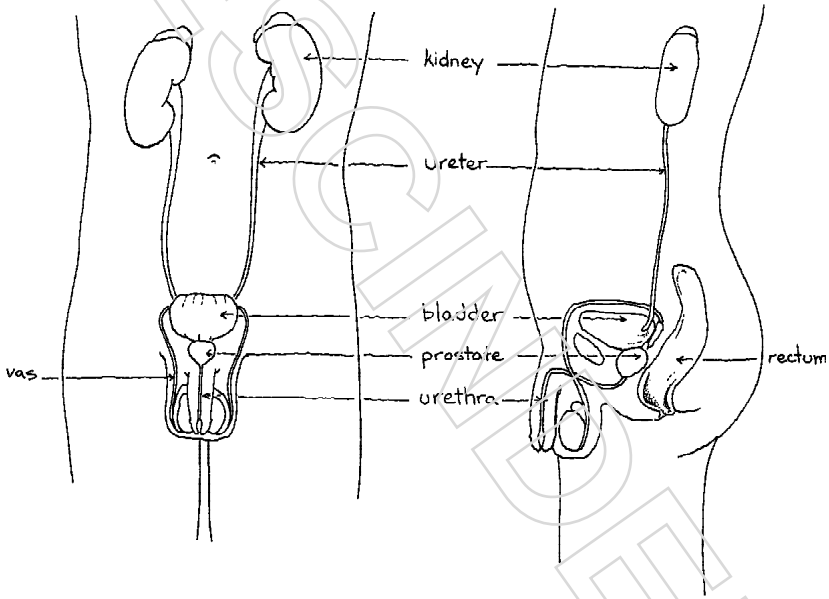


*Diagram of the urinary system in men.The kidneys filter excess water and waste substances from the blood.These then pass down the ureters to the bladder, where they are stored until voided through the urethra. The prostate gland surrounds the urethra just below the neck of the bladder.The rectum, which is the final part of the digestive system, is located to the rear of the bladder, prostate and urethra. The vas carry sperm from the testicles to the urethra.*

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## Prostate gland

The *prostate gland* is found only in men. About the size of a walnut, it surrounds the urethra just below the neck of the bladder. Its job is to secrete a milky fluid which becomes part of the semen and nourishes the sperm.

## Simple urinary symptoms

Urinary symptoms usually occur with increasing frequency as you get older. They are most likely a normal part of ageing. These symptoms may include any or all of the following:

- the need to waken frequently from sleep to urinate
- urinating too frequently during the daytime
- a feeling of urgency to urinate
- urge incontinence—a sudden, strong desire to urinate that you are unable to control for sufficient time to reach a toilet
- hesitancy—a feeling that you want to pass urine but it takes a while before it starts
- after-dribble—the loss of urine after re-dressing. This may happen just as you finish passing urine, but often occurs a little later, after you have left the toilet
- feeling of incomplete emptying of the bladder
- poor stream of urine flow—difficulty in projecting the urinary stream outwards
- feeling the need to pass urine within a few minutes of having done so.

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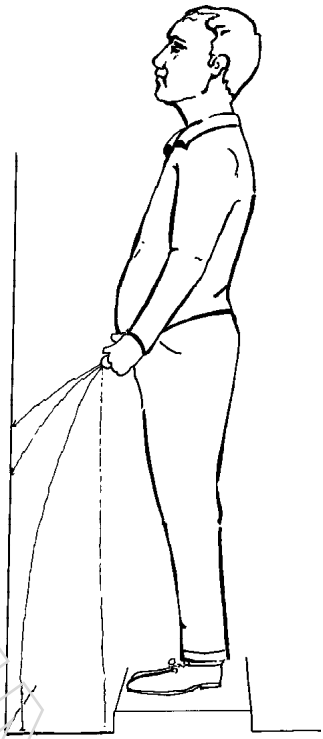

*It is natural for the stream to become poorer as you age. Which line most represents your normal urinary stream?*

## Urinary retention

Some men may be unable to urinate at all. This is known as *acute urinary retention* and requires urgent medical treatment. A *catheter*—a thin, soft, flexible tube—is inserted through the urethra and into the bladder. This allows the urine to drain and brings immediate relief. Although it is known that certain factors can cause urinary retention, there is no way to predict whether or not it will happen to you. Factors which may be associated with urinary retention include excessive alcohol consumption, prolonged travel, constipation, and surgery—particularly for anal problems or for hernias. Developing urinary retention does not necessarily mean that you will need an operation.

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## Causes of simple urinary symptoms

For a long time, the sole cause of simple urinary symptoms was believed to be enlargement of the prostate gland. It was thought that the enlarged prostate pressed on the urethra, obstructing the urine flow and creating the urinary symptoms. It is now known that this is not the *only* explanation.

Simple urinary symptoms are caused by a combination of changes in bladder, urethra and prostate function, some of which are likely to be related to age. For example, obstruction to the flow of urine may be caused by over-activity of the muscles in the prostate, and symptoms of frequency, urgency and even urge incontinence may be due to over-activity of the bladder muscle.

***Research has shown that there is no clear connection between the size of the prostate and the type and severity of urinary symptoms.***

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Increase in the size of the prostate is known as benign prostatic hyperplasia (BPH). *The degree of enlargement varies from man to man and is of little importance as research has shown that there is no clear connection between the size of the prostate and the type and severity of urinary symptoms.*

If all you have are simple urinary symptoms and no other condition, it is extremely unlikely that you have any serious problem which could cause any health threat to you, either now or in the future. You may feel, nevertheless, that your symptoms interfere with your quality of life.

## Urinary symptoms and conditions requiring different treatment

There are other urinary problems you might have aside from those listed above. If you have any of these, you are likely to require medical treatment of a type not covered by this book. These complicated urinary problems include:

- haematuria—blood in your urine
- pain on urinating
- other types of genital pain
- urinary retention—an inability to empty the bladder
- urinary incontinence (uncontrolled and involuntary loss of urine) which is:
  - severe
  - continuous.

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## Other medical conditions

Some men with urinary symptoms also have coexisting medical conditions which complicate matters and require other medical assistance. These conditions include:

- brain disorders and brain damage as a result of accidents or disease
- Alzheimer's disease and dementia
- diseases of the nervous system—Parkinson's disease, nerve damage, multiple sclerosis
- alcoholism
- diabetes (perhaps undiagnosed).

***If you have other symptoms or medical conditions, the information presented in this guide does not apply to you and you should consult your doctor about the symptoms or condition and the treatments available.***

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## Factors which increase the severity of urinary symptoms

Some men may have other factors which aggravate the severity of their urinary symptoms. These may include:

- confusion
- impairment in mobility
- impaired manual dexterity—for example, difficulty in undoing your pants
- constipation
- acute illness which accentuates the urinary symptoms
- environmental factors which make it difficult to reach a toilet quickly, such as the need to use stairs or getting to the toilet in the dark
- polyuria—the passing of an excessive quantity of urine
- medications.

Many of these problems can be overcome to reduce the severity of the urinary symptoms. In addition to your doctor, you can seek assistance from health professionals such as nurses, physiotherapists and occupational therapists who can help make your symptoms less bothersome.

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Chapter 2

# Bothersome Symptoms

This book uses the term bother or bothersome to describe your concerns about urinary symptoms.

There may be a number of reasons why you become concerned or bothered by your urinary symptoms.You may find that the severity of some, or all of your symptoms, interferes with your quality of life. On the other hand, you may not be particularly bothered about this aspect of the symptoms. Instead, you or your partner may be worried that the symptoms may indicate a more serious underlying problem.

You should think about how concerned you are about your symptoms.You might start by asking yourself whether the symptoms bother you sufficiently to consider finding out what treatment is available. You may like to discuss this with your doctor or assess the degree of bother by choosing, from the following list, the option which best matches how you feel.

- I am not at all bothered
- I am bothered just a little bit

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- I am moderately bothered and would like to consider the options before deciding if I want any treatment and, if so, which type
- I am very bothered and definitely want to consider the options and treatments.

There is strong evidence to suggest that people who are 'very bothered' have a better chance of achieving a good result from treatment. If you are not very bothered, you may find the result of treatment is no better or even worse than your current condition.

***The degree to which you are bothered by your urinary symptoms should determine your choice of treatment.***

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Chapter 3

# Visiting the Doctor

## Making your decision

You may decide that the information in this book is sufficient to permit you to make your own decision regarding any further management of your urinary symptoms. If you decide that your urinary symptoms are best discussed further with your doctor, then this guide may help you to ask the most appropriate questions. This should ensure that you will be adequately informed about your condition and its treatment. Your decisions will be more effective if you understand more about the problem.

Some men have found that talking to other men who have had similar experiences has helped them to make up their minds. Appendix C gives information about such support groups.

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***You do not need to see your doctor unless you are <u>bothered</u> by the urinary symptoms listed on page 11.***

## Explaining your symptoms

If you decide to visit your doctor, you need to explain your symptoms and how severe they are, and if you have had these or similar symptoms in the past. You will also be asked about your general health, any specific medical problems, any previous operations, and any medications that you may be taking.

Your doctor will also be interested in any social or psychological problems that you might have, as these may also have an effect on the diagnosis. A physical examination will also be required. Your doctor will examine your abdomen to see if you have a distended bladder. Your genitals may be checked for abnormalities which can affect your ability to urinate.

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Your prostate gland may be examined.This examination is called a digital rectal examination (DRE) and involves your doctor sliding a lubricated, gloved finger into your *rectum* to feel the shape and texture of your prostate gland.

*In a digital rectal examination, your doctor feels the shape and texture of your prostate gland with his finger through the rectum.*

Your urine will be tested to see if you have a urinary tract infection and to check for protein, sugar, white and red blood cells—these may indicate that you have another medical condition.

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The doctor may ask you to keep a voiding diary for the next few days. You will be asked to record the time and volume of fluid intake, and time and volume of urine output. Any episodes of incontinence should also be recorded.You may choose to keep a voiding diary (Appendix B of this booklet gives an example) before your initial consultation.

Your doctor will discuss the results of your examination with you. If you are at all unsure about what the test results mean, don't hesitate to ask more questions.

## Anxiety about prostate cancer

Anxiety about prostate cancer is becoming a major reason why men consult a doctor.This anxiety may be yours alone, or shared or even initiated by others close to you, such as your partner, family member or friends. While the anxiety may be caused by urinary symptoms it may also be heightened by other factors, such as publicity given to prostate cancer.

Keep in mind the following facts. Most men *do not develop* prostate cancer. Only 1 in every 18 men will be found to have prostate cancer during their lifetime and only 1 in 70 will die of the disease. Of all the men with prostate cancer, only one in three die of the disease itself, and the other two from some other cause.

### Prostate Specific Antigen (PSA) testing

This is a blood test to see if there is any likelihood that you might have prostate cancer, but remember that it is not specific for this

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disease. It is important for you to make your own decision about whether you wish to be tested for prostate cancer.To decide, you need to know the following.

The test uses a sample of your blood to measure the level of prostate-specific antigen in your body. Normal test results fall between 0 and 4 nanograms (a nanogram is a billionth of a gram). If your test result is normal, this does not completely rule out the possibility that you have prostate cancer. It does suggest, however, that the chance of you having it is quite slight.

On the other hand, a raised level does not automatically mean that you have prostate cancer.The likelihood that you have cancer will depend to some extent on the level of PSA. If it is below 10 nanograms, the chances are from 25 to 30%. If the result is above 10 nanograms, the risk of having cancer rises to 50% or more, depending on the exact value. In other words, even if the level is raised there is at least a two in three chance that you will not have cancer.To be more certain you would need to have a biopsy of the prostate which is usually done under ultrasound control. In 2% of biopsies, serious complications arise.

Even if you were found to have prostate cancer, the Australian Health Technology Advisory Committee (AHTAC) Report on Screening for Prostate Cancer advises that early intervention and treatment for localised prostate cancer, using either surgery or radiotherapy, has not been demonstrated to reduce complications of the disease or improve the 10-year survival rate. There is no strong evidence that these treatments are better than not having any immediate treatment.

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Whether you personally would benefit from treatment of prostate cancer is something only you could decide after considerable testing and extensive discussion between you and your urologist.

In the end, only you can make the decision whether you wish to be tested for prostate cancer. If you would like more information about this you can obtain a copy of the AHTAC Report by writing to:

AHTAC
Mail Drop 107
GPO Box 9848
Canberra ACT 2601

***Current research shows that early stage prostate cancer usually has no symptoms.***

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## Need a second opinion?

If you have any questions, you should ask your doctor.There may be times where you find that, despite the best efforts of you and your doctor, you are unable to get all the information or advice you feel you need to make your decisions. Whenever such a situation arises, you should think about a second opinion. Having a second opinion can help clear up any questions in your mind, can assist you in deciding which doctor you prefer to manage your treatment, and can help you decide which course of treatment to follow.

While some people are embarrassed to tell their doctor that they wish to have another opinion it may be in your best interest to do so. If you decide to take this step, ask that all the information already known about your condition be forwarded to the next doctor.This will save you time and effort.

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Chapter 4

# Urinary Tests

Traditionally, there have been a number of tests which have been performed on men with urinary symptoms. These have been done on the presumption that the findings may help the doctor to:

- advise you what the probable course of your symptoms is likely to be, particularly if you decide against immediate treatment; and
- help to predict the outcome of treatment in your specific case.

Unfortunately, there is no strong scientific evidence that any of these tests are particularly useful in helping to predict the need for, or the likely outcome of, treatment for simple urinary symptoms. On the other hand, there may be some specific feature of your history or examination findings which suggests that one or more of these tests might be helpful.

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The tests for urinary symptoms include:

- Serum creatinine—a blood test for kidney function that identifies a substance called creatinine which is excreted by your kidneys
- Upper urinary tract imaging—use of ultrasound or x-rays for imaging the kidneys and bladder
- Post void residual urine estimation (PVR)—estimating the volume of urine remaining in the bladder after you have finished passing urine. This is usually done using an ultrasound examination of your lower abdomen or by passing a catheter into your bladder
- cystoscopy—passing an instrument through your urethra to look at your prostate and bladder.
- urodynamic studies—studies using equipment that measures how fast you pass urine—a urine flow rate—and the pressure in your bladder.

If you have symptoms other than the simple urinary symptoms listed on page 11, then some of the above tests may be necessary to determine their cause.

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*If your doctor suggests that you have any of these tests, it is quite reasonable to ask why the tests are needed and how the results will help with your particular problem.*

WITHDRAWN

Chapter 5

# Options for Treatment

***If you have simple urinary symptoms only, you can be reassured that they seldom give rise to any health threatening condition. Nevertheless, you may feel that they interfere with your quality of life.***

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You will, by now, have discussed with your doctor the nature and severity of all the symptoms which are bothering you. You should also have reported any other concerns, such as a fear that you might have cancer, or some other serious problem. Your doctor will in turn have examined you and tested your urine.

It will now be time for the two of you to discuss your problem. If you have been reassured that you do not have any serious disease, you can turn your attention to whether you wish to have any treatment for your urinary symptoms. As already mentioned, your decision whether you even wish to learn more about such possible treatments should largely be determined by just how bothered you are by the symptoms.

Simple urinary symptoms can be treated in various ways. There is no preferred option, and only you can decide which treatment offers you the greatest benefit for the least personal and financial cost.

After reading this guide, and clarifying any remaining unanswered questions with your doctor, you should have enough information to make the decision about a treatment that best suits your condition.

The four approaches to managing your urinary symptoms are:

- advice and lifestyle change
- medication
- surgery
- emerging treatment options.

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Before deciding to proceed with medication, surgery or other therapies, you should be aware of the benefits, costs, side-effects and disadvantages of each form of treatment, and of the time it may take to achieve any results.

***It is your responsibility, in consultation with your doctor, to make the final decision about the type of treatment you want for your urinary symptoms.***

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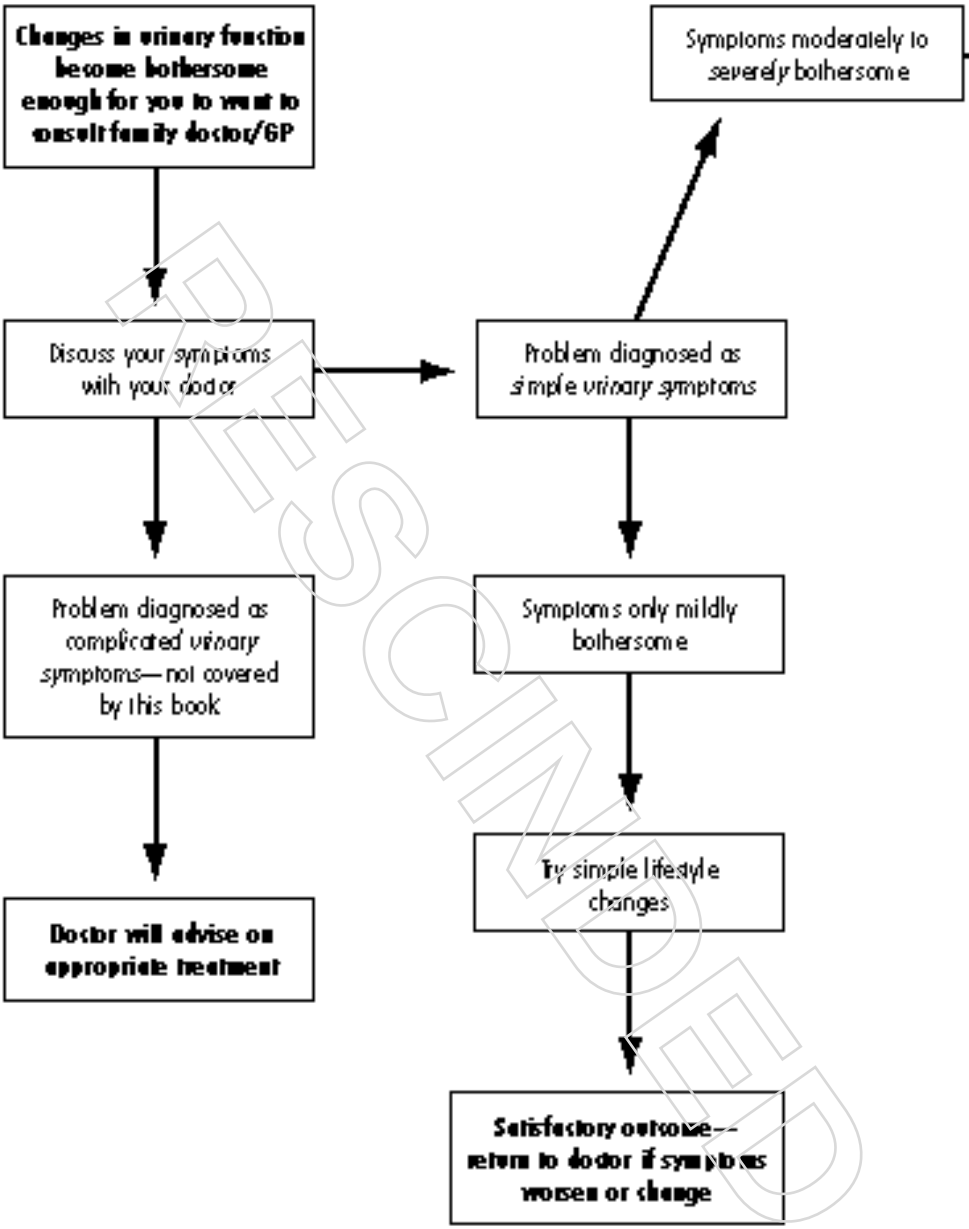
Changes in urinary function become bothersome enough for you to want to consult family doctor/GP
Discuss your symptoms with your doctor
Problem diagnosed as complicated urinary symptoms—not covered by this book
Doctor will advise on appropriate treatment
Problem diagnosed as simple urinary symptoms
Symptoms moderately to severely bothersome
Symptoms only mildly bothersome
Try simple lifestyle changes
Satisfactory outcome—return to doctor if symptoms worsen or change

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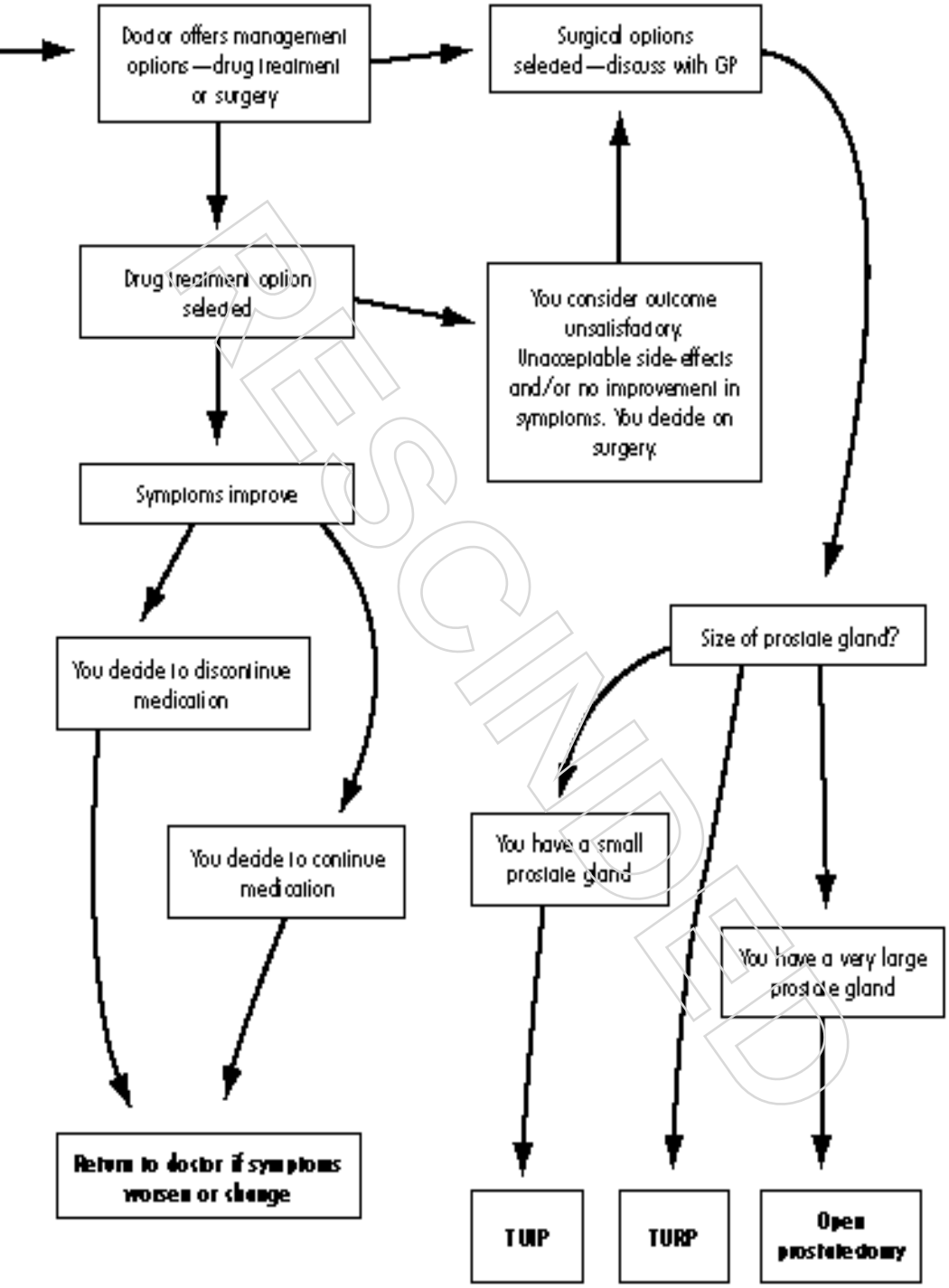
DECIDING HOW TO DEAL WITH YOUR URINARY SYMPTOMS


Doctor offers management options—drug treatment or surgery
Surgical options selected—discuss with GP
Drug treatment option selected
You consider outcome unsatisfactory. Unacceptable side-effects and/or no improvement in symptoms. You decide on surgery
Symptoms improve
You decide to discontinue medication
You decide to continue medication
Return to doctor if symptoms worsen or change
Size of prostate gland?
You have a small prostate gland
You have a very large prostate gland
TUIP
TURP
Open prostatectomy
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To find out the cost and likely out-of-pocket expenses for any of these treatments ask your general practitioner or specialist.

You should also be aware that you may have some improvement in symptoms without any treatment.

Even though you are not excessively bothered by your symptoms, you might be inclined to opt for surgery because you feel it is better to get it over with now rather than when you are older and perhaps not as fit. You should be aware that the risks of surgery for simple urinary symptoms increase only slightly as you get older.

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Chapter 6

# Advice and Lifestyle Change

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If you decide that your urinary symptoms are not causing you much bother, and you feel that you can quite happily live with them, then there will be no need for further action. This does not suggest that you should never see your doctor again. You should seek further assistance from your doctor if:

- there is a change in your symptoms
- you become more bothered by your existing symptoms.

Your doctor may ask you to keep a urine voiding diary for a few days. This is a record of your fluid intake and urine output, detailing volumes and times. It may be helpful in identifying factors in your lifestyle or medical care which may easily be changed. A sample of a voiding diary can be found in Appendix B.

Simple lifestyle changes that your doctor may advise you to make to minimise the impact of your symptoms on your life include:

- fluid intake—change the timing of your fluid consumption so that you drink more in the morning and less in the afternoon and evening. This should reduce the volume of urine you produce during the night. Do not cut down on the amount of fluid you are required to drink in a day

- alcohol and caffeine—avoid alcohol and caffeine drinks such as coffee, tea and cola.They are diuretics and make you pass more urine and more often

- medication—some drugs are also diuretic, increasing the amount of urine you make naturally.Your doctor will need to advise you about beneficial changes you might make to your medication schedule

- urethral stripping for after-dribble—starting behind your scrotum, run your finger along the length of your water passage stripping the urine out

- toilet scheduling—sometimes it may be more convenient and comfortable for you to draw up a time table for visits to the toilet

- distraction techniques—thinking of something else, with the aim of extending the time between visits to the toilet

- wiping—after urinating, wipe any remaining urine with some toilet paper.

Pelvic floor exercises and bladder training programs may be recommended to alleviate your symptoms. Appendix D contains details of publications giving more information about these.

RECOMMENDED

Chapter 7

# Medication

A number of drugs are available in Australia for the treatment of simple urinary symptoms. The results of many trials of these drugs show that some men will respond to them and some will not.

Men who are moderately bothered by their urinary symptoms may prefer to try medication before surgery. It is reported that 30% of men who take medication for their urinary symptoms experience a reduction in the severity of their symptoms.

It is important that you obtain from your doctor specific instructions about the dose and side-effects of any medication recommended. The law also requires that all drugs have product information included with them so that you can make your own assessment. Product advice, known as the Consumer Pharmaceutical Information (CPI), is also available from your pharmacist.

You may also like to check with your doctor on which drugs are available on the Pharmaceutical Benefit Scheme (PBS) as these drugs may cost you less.

RECOMMENDED

## Alpha andrenergic blocking agents

Drugs in this group act by blocking the nerve supply to the muscles of the bladder neck, sphincter and prostate. They alleviate symptoms by decreasing the muscular contraction of the prostate, reducing resistance of the urethra.This may increase the urine flow.

Prazosin has been used in the treatment of high blood pressure for over 20 years. Its use for urinary symptoms is more recent and there have been very few scientific studies undertaken to determine its effectiveness.

Terazosin has also been used in the treatment of high blood pressure but is sold in Australia specifically for the treatment of urinary symptoms. Scientific studies have demonstrated that in some men this drug can decrease the level of bother of urinary symptoms. There is no way to predict who will have a good response to this drug.

Side-effects: There is a one in six chance that you will have undesirable side-effects that may make you decide to stop the treatment. They include headaches, dizziness, a stuffy nose and a feeling of being unwell.You may also develop retrograde ejaculation (see page 44) for as long as you take the drug. If you are bothered by these problems you should stop the medication and visit your doctor. If you choose to take these drugs, and they work for you, you can expect some improvement in symptoms within 6 weeks.

RESCINDED

## 5 alpha reductase inhibitor —finasteride

This drug blocks the transformation of the male hormone testosterone into its active ingredient in the prostate. It has no effect on the level of testosterone in the rest of the body, only in the prostate.

Scientific studies have shown that only men with large prostates may benefit from treatment with finasteride. Research shows that they can experience a mild reduction in the severity of their urinary symptoms. Before taking this drug, prostate size should be established by a transrectal ultrasound. Medicare rebates for this test are available only if it is recommended following evaluation of a man's prostate by a urologist.

It can take up to 6 months for the effect of finasteride to become apparent and you must continue to take the drug to maintain the effect. Finasteride should be prescribed only after an assessment by a urologist.

Side-effects: About 1 in 10 men experience some side effects which include a reduction in sexual interest or an inability to maintain an erection.

It is recommended that if you take finasteride you should be assessed at three and six month intervals after commencing treatment. If there is no improvement in your symptoms after 6 months, there is little point in continuing treatment.

RESCINDED

## Anticholinergics

The drugs propantheline and oxybutynin, and the trycyclic antidepressant agents—imipramine, nortriptyline and amitriptyline––are anticholinergic agents.They can help the bladder store more urine and therefore reduce how often you need to pass urine.They may also help control urge incontinence.

All of these drugs reduce the contractility of the bladder and might cause an increase in the difficulty in passing urine.This could, in turn, induce urinary retention. Urinary retention is usually reversible when the effects of the drug wear off after 1–2 days. It will require a catheter being passed through your penis into your bladder to remove the urine. For this reason it is advisable to start off with a very low dose and gradually increase it until there is a desirable result without an adverse effect.

If these agents work for you, you should expect an improvement in your symptoms after two weeks of treatment.

Side-effects: Besides urinary retention, side-effects of the anti-cholinergics include a dry mouth, constipation and possibly blurred vision. In some men, they may also cause drowsiness and unsteadiness, making them more prone to accidents and falls.

## Non-pharmaceutical products

Most of the medications included under this heading are made of plant extracts and are known as phytotherapeutic agents.Very few of these products have been subjected to the same testing as required of other drug therapies and there is limited information about any toxic side-effects.This does not mean that they should not be used in the treatment of urinary symptoms, but consumers should be aware of their status.

REPRODUCED

Chapter 8

# Surgery

If you have received no benefit from lifestyle change or a trial of medication, or if you are severely bothered by your urinary symptoms, you may wish to consider an operation.

***Surgery has the most to offer you if you are severely bothered by your symptoms. You may also wish to consider surgery if you have less bother, but you may not derive quite as much benefit.***

RECOMMENDED

## Choosing a specialist

Your doctor may ask if you wish to see a particular urologist, or may recommend one to you.You are encouraged to discuss this selection with your doctor.

You may be unwilling to travel, and so be quite happy to see the specialist who is closest to where you live. On the other hand, you might opt to travel some distance to see the urologist of your choice. This may be across the city, or from a smaller town to a large city where there are various urologists to select from. It sometimes comes down to finding the balance between convenience, accessibility, cost, expertise and compatibility.

## Types of surgery

There are three standard operations used to treat urinary symptoms:

- transurethral resection of the prostate (TURP)
- transurethral incision of the prostate (TUIP)
- open prostatectomy

Which one is the best for you depends on factors such as the size of your prostate and any specific medical problems that you may have.

Because surgery could have complications, some of which might be permanent, you should give serious thought to your decision.

RESCINDED

## Problems that might worry you after surgery

There are always risks associated with surgery. The major complications which might arise following surgery for urinary symptoms are as follows:

- retrograde ejaculation—in normal ejaculation semen is expelled down the urethra and through the tip of the penis. Retrograde ejaculation occurs when the semen is ejaculated back into the bladder. It may result in infertility
- urinary incontinence or the loss of bladder control
- impotence—the inability to establish or maintain an erection
- delayed bleeding
- pain on passing urine
- retreatment—some men may need more treatment after surgery, either because of complications or a recurrence of the original symptoms.
- urinary retention—inability to pass any urine because of bleeding or other causes
- scarring—surgery may cause scarring to the bladder neck and urethra and a consequent narrowing of the water passage. This may require further surgical treatment

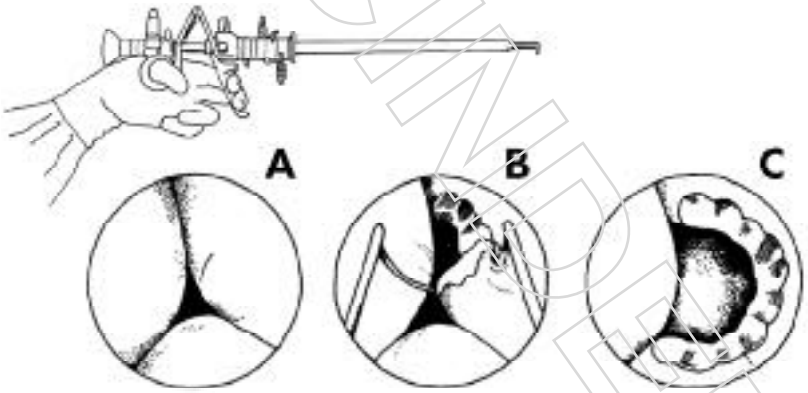
Research has shown that undergoing surgery for urinary symptoms neither increases nor decreases the risk of prostate cancer developing in subsequent years.

RESCINDED

# Transurethral resection of the prostate (TURP)

This is the most common surgical procedure used to treat urinary symptoms in men. A *resectoscope* is passed along the urethra and into the bladder. An electric current passed through a wire loop on the end of the resectoscope is used to cut the prostate tissue one piece at a time. The pieces of tissue are then flushed out with fluid through the resectoscope.

The procedure is usually performed under a spinal anaesthetic, and the operation takes about an hour, depending on the size of the prostate.




*A resectoscope, and the surgeon's view through it during TURP. Before the operation (A) the prostate is enlarged. The surgeon uses the cutting device of the resectoscope to remove pieces of enlarged prostate (B). At the end of the operation (C) the enlarged prostate has been cored out.*

RESCINDED

Following the operation, a catheter will be inserted through the opening in your penis for 24–72 hours depending on the amount of bleeding. It is used to drain urine and wash out blood from your bladder. Once the catheter is removed, you should be able to pass water easily. The hospital stay for TURP is generally 2–4 days, and you could expect to be back to full activities within 4 weeks.

Follow-up studies have shown that 75% of men who have a TURP report a successful outcome.

The average risks of various complications that may occur following TURP are:

- retrograde ejaculation—ejaculation back into the bladder (80%)
- incontinence—loss of bladder control (3%)
- impotence—inability to have an erection (up to 14%). The chance that this will occur may depend on the man's level of potency before surgery. Some men's potency may improve after an operation, in many there is no change, and in some it deteriorates
- up to 10% of men who have a TURP will need retreatment within 5 years of their surgery
- post-operative bleeding, sometimes with urinary retention (up to 13%)
- bladder neck scarring leading to further urinary problems (2%)

RESCINDED

## Transurethral incision of the prostate (TUIP)

TUIP is the most suitable operation for small prostate glands. Larger glands require a TURP.

A TUIP is also performed with a resectoscope. One or two cuts are made into the bladder neck and prostate to widen the urinary passage. TUIP does not involve removal of any of the prostate. The operation can be done as a day procedure or a stay in hospital of 1–2 days may be involved. The operation takes about 20 minutes and is usually performed under general anaesthetic.

You may need a catheter for 24 hours to ensure urine drainage from the bladder. Most men are back to full activities within 10 days.

Follow-up studies have shown that 70% of men who have a TUIP report a successful outcome.

The average risks of various complications that may occur following TUIP are:

- retrograde ejaculation—ejaculation back into the bladder (25%)
- incontinence—loss of bladder control (0.2%)
- impotence—inability to have an erection. Although there is no recent information on the incidence of this complication, it seems very unlikely that impotence will occur
- up to 15% of men who have a TUIP will need retreatment within 5 years of their surgery

RESCINDED

- bladder neck scarring leading to further urinary problems (0.4%)

Patients surveyed 10 years after surgery reported a similar reduction of symptoms whether they had undergone TURP or TUIP. TUIP is a quicker and simpler procedure requiring less time in hospital and off work.

## Open prostatectomy

Open prostatectomy is usually needed only for exceedingly large glands.The enlarged portion of the prostate is removed during the operation, which is performed through an incision in the abdomen. You may need to be in hospital for up to 7 days, but should be back to full activities within 4 weeks.

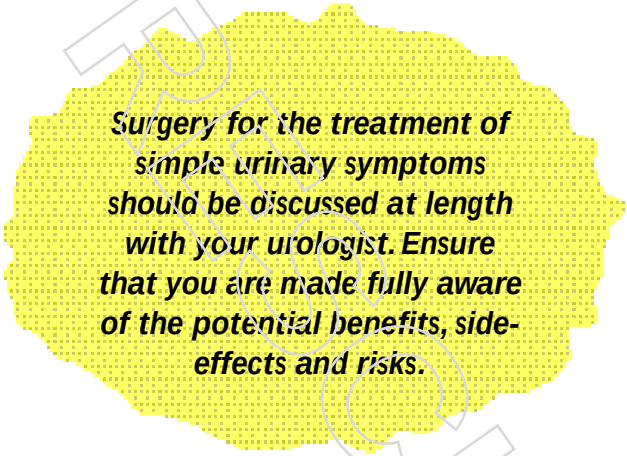
It is important to realise that this is *not* the same operation as the surgery for cancer confined to the prostate—an operation known as radical or total prostatectomy.

You should be aware that the risks and complications that may occur following open prostatectomy are:

- retrograde ejaculation—ejaculation back into the bladder (up to 100%)
- incontinence—loss of bladder control (2.5%)
- impotence—inability to have an erection. There is no recent information on how frequently this occurs, but some older reports suggest it may be as high as 30%.

RESCINDED

- need for retreatment (3%)
- bladder neck scarring leading to further urinary problems (2%).


Surgery for the treatment of simple urinary symptoms should be discussed at length with your urologist. Ensure that you are made fully aware of the potential benefits, side-effects and risks.

PRECOINDED

## Surgery and prostate cancer

None of these operations removes all of the prostate. Because of this, none of them protects you from the possibility of developing prostate cancer in the future.

Chapter 9

# Emerging Treatment Options

There are some surgical procedures for the treatment of urinary symptoms which have yet to be proven fully effective. New and different options not covered in this book will continue to be developed. If you are considering these options, you should ensure that you are fully informed about the potential benefits, risks and costs before you agree to any such procedure.

Most of the procedures act by heating the prostatic tissue, turning it to vapour, causing it to die, or resulting in other indeterminate changes.

The heating methods used include:

- lasers (for example, visual laser assisted prostatectomy, VLAP)
- microwaves (for example, transurethral microwave thermotherapy, TUMT)
- radio frequencies (for example, transurethral needle ablation, TUNA)

RESCINDED

If you choose to undergo any of these treatments, you should be aware of the following facts:

- After heating the prostate by laser, the tissue dies and is slowly passed through your urethra for several months. Significant irritation usually also occurs.
- It is quite likely that you will need a catheter for up to 7 days after some of these procedures.
- Some of these treatments may be less likely to cause bleeding or other complications, and some can be done without anaesthetic.

***Many of these treatments have not been tested over a sufficiently long time to be sure that they produce a lasting benefit. Men are encouraged to seek as much information as they need about any specific treatment. Many of the treatments are considered to be still experimental.***

Reproduced

# Appendix A

## Working Party on Voiding Dysfunction in Men — Terms of Reference and Membership

RESCINDED

### Terms of Reference

- Undertake the development and implementation of clinical practice guidelines which will facilitate the identification and care of men with voiding dysfunction.
- In fulfilling this task, review key literature and follow the procedures recommended by the Quality of Care and Health Outcomes Committee's draft first edition of Guidelines for the development and implementation of clinical practice guidelines.
- Provide advice and present clinical practice guidelines to the Quality of Care and Health Outcome Committee.

### Membership:

| | |
|---|---|
| Dr Geoffrey Hirst (Chair) | Urologist |
| Dr James Butler | Health economist |
| Dr Veronique Lajoie | General practitioner |
| Dr Peter Maher | Urologist |
| Professor Villis Marshall | Urologist |
| Dr Michael Sladden | General practitioner |
| Mr Anthony Walsh | Consumer representative |
| Dr Jeanette Ward | Methodologist/Health services representative |
| Ann Burgess | Freelance writer |

# Appendix B

## Voiding Diary*

| TIME & VOLUME CHART | | | | Name: | John Citizen | | | |
|---|---|---|---|---|---|---|---|---|
| INTAKE | | | | OUTPUT | | | | |
| Date | Time | Type of fluid | Volume,ml | Date | Time | Output | Leakage | Comment |
| 2 Oct | 7.30am | tea | 200 | 2 Oct | 7.00am | 340 | wet | |
| | 8.00am | tea | 200 | | 8.00am | 50 | no | |
| | | fruit juice | 250 | | 9.15am | 340 | no | |
| | 10.00 | coffee | 200 | | 12.00 | 300 | damp | |
| | 12.30 | beer | 450 | | 2.00pm | 400 | | |
| | | | | | 2.30pm | 200 | | |
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RESTRICTED

* Courtesy: Continence Foundation of Australia

## TIME & VOLUME CHART Name:

| INTAKE | | | | OUTPUT | | | | |
|---|---|---|---|---|---|---|---|---|
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## TIME & VOLUME CHART Name:

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| Date | Time | Type of fluid | Volume/ml | Date | Time | Output | Leakage | Comment |
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# Appendix C

## Contacts

Council on the Ageing (Australia)
Level 2, 3 Bowen Crescent
Melbourne VIC 3004
Tel (03) 9654 4443

Australian Cancer Society
Level 9, 140 Williams St
Woolloomooloo NSW 2011
Tel (02) 9358 2066

Australian Kidney Foundation
1st Floor, 82 Melbourne St
North Adelaide SA 5006
Tel (08) 8267 4555

Carers Association of Australia
Cnr Hilder and Gritten Streets
Weston ACT 2611
[PO Box 3717, Weston ACT 2611]
Tel (06) 288 4877

Continence Foundation of Australia
GPO Box 9919 in your capital city
Freecall 1800 069 789

US TOO Australia—prostate disease support groups for men
59 Victoria Parade
Collingwood VIC 3066
Tel (03) 9419 2163

These are national bodies. If you call them, they will give you local contacts.

RESCINDED

# Appendix D

## Further Reading

Clinical practice guidelines for the management of uncomplicated lower urinary symptoms in men
Publications Office
National Health & Medical Research Council
Mail Drop 50
GPO Box 9848
Canberra ACT 2601

Prostate Cancer Screening--Questions and Answers
Australian Health Technology Advisory Committee
Mail Drop 107
GPO Box 9848
Canberra ACT 2601

Fact sheets:

- Pelvic Floor Exercises for Men
- Bladder Training
- Good Bladder Habits
- Bladder Problems & the Prostate
- What is Urinary Incontinence

Continence Foundation of Australia
GPO Box 9919 in your capital city.

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